

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,602	11/28/2003	Kouji Mitsuhashi	246070US2	8264
22850 . 7	22850 7590 11/30/2005		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			DHINGRA, RAKESH KUMAR	
	DUKE STREET XANDRIA, VA 22314		ART UNIT	PAPER NUMBER
	•		1763	
			DATE MAILED: 11/30/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/722,602	MITSUHASHI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Rakesh K. Dhingra	1763				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. sely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 28 No.	ovember 2003.					
2a)☐ This action is <b>FINAL</b> . 2b)☒ This	☐ This action is FINAL. 2b) ☐ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)  Claim(s) 1-36 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) 1-36 are subject to restriction and/or expressions.	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119		•				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO 802)	<b>∧</b> □	(DTO 440)				
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 1763

## **DETAILED ACTION**

## Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention:

Species 1(as per Figures 4a-4C): An internal member of a plasma processing vessel comprising a base material with a film that is formed by thermal spraying of ceramic and where the film is formed from a group consisting of B, Mg, Al, Si, Ca, Y, Zr, Ta, Ce, and Nd and a portion of film is sealed by a resin.

Species 2 (Figures 6A, 6B): An internal member of a plasma processing vessel comprising a base material with a first ceramic layer and a second ceramic layer that are formed by thermal spraying of ceramic and where the layers are formed from a group consisting of B, Mg, Al, Si, Ca, Y, Zr, Ta, Ce, and Nd and at least a portion of one of the first and second layers is sealed by resin.

Species 3 (generally as per Figures 4a-4C): An internal member of a plasma processing vessel comprising a base material with a film that is formed by thermal spraying of ceramic and where the film is formed from a group consisting of B, Mg, Al, Si, Ca, Y, Zr, Ta, Ce, and Nd and a portion of film is sealed by a sol-gel method.

Species 4 (generally as per Figures 6A, 6B): An internal member of a plasma processing vessel comprising a base material with a first ceramic layer and a second ceramic layer that are formed by thermal spraying of ceramic and where the layers are formed from a group consisting of B, Mg, Al, Si, Ca, Y, Zr, Ta, Ce, and Nd and at least a portion of first and second layers is sealed by sol-gel method.

\_ - - -

Art Unit: 1763

Species 5 (generally as per Figure 2): An internal member of a plasma processing vessel comprising a base material with a film formed on it surface and where the film has a main layer formed by thermal spraying of ceramic and a barrier coat layer formed from a group consisting of B, Mg, Al, Si, Ca, Y, Zr, Ta, Ce, and Nd.

Species 6: An internal member of a plasma processing vessel comprising a base material with a film formed on it surface and where the film has a main layer formed by thermal spraying of ceramic and a barrier coat layer formed of engineering plastic formed between the base material and the main layer.

Species 7 (generally as per Figure 8): An internal member of a plasma processing vessel comprising a base material with a film formed on it surface and where the film is formed of ceramic including at least one element from group 3a of periodic table and at least a portion of film is hydrated by vapor or high temp. hot water.

Species 8 (generally as per Figures 14A, 14B): An internal member of a plasma processing vessel comprising a base material with a film formed on its surface and where the film has a first ceramic layer and a second ceramic layer that are formed from a group consisting of ceramic including at least one element from group 3a of periodic table and at least a portion of at least one of first and second ceramic layer is hydrated by vapor or high temp. hot water.

Species 9 (generally as per Figure 16): An internal member of a plasma processing vessel comprising a base material with a film formed on its surface and where the film has a first ceramic layer that is formed from a group consisting of ceramic including at least one element from group 3a of periodic table and a second ceramic layer formed by

Art Unit: 1763

thermal spraying of ceramic and at least a portion of the first ceramic layer is hydrated by vapor or high temp. hot water.

Species 10: An internal member of a plasma processing vessel comprising a base material with a film formed on it surface and where the film has a hydroxide layer formed of hydroxide including at least one kind of element of group 3a of the periodic table.

Species 11 (generally as per Figure 20): An internal member of a plasma processing vessel comprising a sintered ceramic body including at least one kind of element of group 3a of the periodic table wherein at least a portion of the sintered ceramic body is hydrated by vapor or high temp. hot water.

Species 12: An internal member of a plasma processing vessel comprising a sintered ceramic body including hydroxide including at least one kind of element of group 3a of the periodic table.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently no claim appears to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Art Unit: 1763

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rakesh K. Dhingra whose telephone number is (571)-272-5959. The examiner can normally be reached on 8:30 -6:00 (Monday - Friday).

Art Unit: 1763

Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Parviz Hassanzadeh can be reached on (571)-272-1435. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Rakesh Dhingra

Parviz Hassanzadeh

Supervisory Patent Examiner

Art Unit 1763